

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT BUREAU FOR HUMANITARIAN RESPONSE (BHR) OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (OFDA)

PERU - Earthquake

Fact Sheet #6, Fiscal Year (FY) 2001

August 9, 2001

Background

According to the US Geological Survey, on June 23, 2001, at approximately 3:33 pm local time, an earthquake with a magnitude of 8.4 on the Richter Scale occurred near the Peruvian coastline some 120 miles west of Arequipa or about 375 miles southeast of Lima, the Peruvian capital. A tsunami subsequently struck along the coastal department of Arequipa, with ocean water surging one half-mile inland. The earthquake was also felt in northern Chile and western Bolivia. Press reports indicate that the earthquake lasted more than one minute. Consistent with expected seismic activity following earthquakes of this magnitude, aftershocks continue to occur, including a major aftershock on July 7 of magnitude 7.6, four aftershocks between magnitude 6 and 7, and more than 1,000 smaller tremors.

Numbers Affected

As of August 8, the Peruvian Civil Defense Institute (INDECI) is reporting that 81 people were killed, 2,734 people were injured, and 64 residents are missing. Estimates by INDECI indicate that a total of 223,679 people have been affected, most of whom were left without shelter. An estimated 36,769 homes suffered some damage, while a further 24,972 homes were destroyed. The displacement of residents is of particular concern to local officials as overnight temperatures in the affected highland areas can drop below freezing.

Department	Affected	Deaths	Injured	Missing	Damaged Homes	Destroyed Homes
Arequipa	88,629	39	2,001	64	15,687	9,143
Ayacucho	2,774	3	56	0	901	461
Moquegua	57,509	25	314	0	4,062	10,004
Tacna	74,767	14	363	0	16,119	5,364
TOTAL	223,679	81	2,734	64	36,769	24,972

Situation

Overview

- On June 24, Peruvian President Valentin Paniagua declared a state of emergency in the departments of Arequipa (population 1,036,000), Moquegua (population 143,000), and Tacna (population 262,000), as well as in the southern provinces of Parinacochas and Páucar del Sara Sara in the department of Ayacucho (population 520,000). President Paniagua asked for international assistance in responding to the needs of those impacted by the earthquake and tsunami.
- The Government of Peru (GOP) established an operations center in Arequipa to coordinate emergency services.
- INDECI established an air-bridge between Lima and Arequipa and GOP aircraft were dispatched to the affected areas carrying relief supplies.
- The Peruvian Red Cross (RCP) has assisted the GOP authorities at all stages of response and recovery.
- The Ministry of Welfare (PROMUDEH) sent teams to the affected areas to conduct food needs assessments. In some areas, the GOP's National Program for Food Assistance has delivered food aid to community kitchens.
- The Ministry of Health (MINSA) sent teams to the affected areas with additional medicines and supplies, as well as sanitary technicians to conduct damage assessments of the water systems.
- The GOP has deployed military personnel to patrol the streets and to help clear the rubble.
- The GOP has allocated \$215 million to emergency relief (\$70 million) and reconstruction (\$145 million). The funds will come from loans provided by the Inter-American Development Bank (IDB), the World Bank, and the Andean Development Corporation.

Damages/Assessments

• Most of the housing stock in the affected areas is of adobe construction. The United Nations Development Program (UNDP) reports that structural damage to housing is more severe than can be observed from the street.

- The coastal towns of Camana, Chala, and La Punta in Arequipa department have suffered severe damage from the tsunami that followed the initial earthquake. The USAID/OFDA assessment team reports that nearly all buildings and municipal services in several nearby villages were destroyed.
- MINSA and the Pan-American Health Organization (PAHO) report that in the affected departments of Arequipa, Ayacucho, Moquegua, and Tacna, 126 medical facilities, including hospitals and health posts, were damaged or destroyed. MINSA reports that repair or replacement of the damaged health infrastructure will cost an estimated \$15.7 million, not including medical supplies or equipment.
- MINSA reported damage to more than half of the water systems. The GOP had estimated that full restoration of the water systems in affected areas would take until early August.
- In general, sanitation systems did not incur significant damage, except in Camana province. Where needed, latrines were built. MINSA and PAHO are continuing to monitor the situation for health risks.
- The Ministry of Energy and Mines reported that electricity has been restored to most of Arequipa, Moquegua, and Tacna departments; however, some rural areas remain without power.
- According to the USAID/OFDA assessment team, public services have been restored in the district of Punta de Bombon in the coastal province of Islay.
- The Pan-American Highway is now passable with some restrictions. Most rural roads have been cleared, although access to some remote areas remains difficult. The ports of Matarani and Ilo did not sustain major damage and are operational. The airports of Arequipa, Moquegua, and Tacna are all reported to be operative. The Ministry of Transport estimates that \$50 million will be required for road and bridge repairs.
- The Ministry of Agriculture indicates 40,843 hectares of cultivation, 255 miles of irrigation canal, 77 reservoirs, 190 distribution canals, 52 wells, and 57 miles of rural road have been damaged. An estimated \$80 million will be required to fully repair this damage.
- The Ministry of Education estimates the damage to educational infrastructure (schools) to be approximately \$55 million.

Multilateral Organization Response

- The United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) mobilized a U.N. Disaster Assessment and Coordination Team (UNDAC). UNOCHA released \$30,000 in an emergency grant for immediate relief assistance.
- The United Nations Resident Coordinator and Swiss Disaster Relief (SDR) established a joint coordination cell within the office of UNDP in Lima. A joint UN-SDR field liaison cell was established in Arequipa.
- A United Nations Interagency Mission has been fielded for assessing rehabilitation and reconstruction requirements.
- UNICEF, in cooperation with the GOP, is supporting the delivery of medicines and school materials to assist children in affected communities, especially in remote areas. UNICEF issued an initial appeal for \$1 million to support its emergency relief efforts in Peru.
- PAHO disaster experts are supporting MINSA and INDECI authorities in assessing health needs, evaluating damages, and providing health services to affected populations. PAHO issued an appeal for \$1.1 million to support its emergency assistance efforts.
- The World Food Program made available \$200,000 in emergency funds for the local purchase of 339 MT of food to assist 20,000 food insecure families during July.
- The International Federation of Red Cross and Red Crescent Societies (IFRC) released an initial appeal for \$1.1 million to support the RCP emergency operation for victims of the earthquake. IFRC airlifted emergency relief items including tents, blankets, and food.
- The American Red Cross provided a donation to the RCP for the purchase of water containers, more than 27,000 blankets, 1,000 tents, and 250 rolls of plastic sheeting with a value of \$600,000. The British Red Cross, the Japanese Red Cross, the Spanish Red Cross, and the German Red Cross all responded to the emergency.
- The IDB prepared a \$20 million emergency loan and provided a \$50,000 grant for immediate medical relief. The IDB also reformulated a portion of Peru's existing loans in the areas of urban infrastructure, roads, health and education, and will prepare additional medium-term financing for the reconstruction process.

Other Donors

- The Governments of Argentina, Brazil, Chile, Colombia, Ecuador, Panama, Uruguay, and Venezuela have provided emergency relief supplies including tents, blankets, medicines, food packages, and airlift support.
- The European Union, through its Humanitarian Aid Office (ECHO), has provided \$1 million in humanitarian assistance to meet the emergency needs of the affected population. The funds are being utilized by NGOs to provide relief items, food aid, temporary shelter, medical support, potable water, and sanitation facilities.
- The Government of Belgium has provided emergency assistance of \$333,000 and shipment of relief supplies.

- The Government of Canada has provided \$280,000 in relief assistance directed through the IFRC, PAHO, and several NGOs for blankets, shelter, and health care.
- The Government of France has provided emergency assistance including 1,000 blankets, 200 five-person tents, and 4,000 food rations.
- The Government of Germany has provided \$1.4 million in emergency relief supplies and assistance towards the reconstruction of damaged housing.
- The Government of Italy has provided \$900,000 of emergency relief assistance.
- The Government of Japan has provided 40 tents, 2,000 blankets, water tanks, generators and \$500,000 in emergency grants.
- The Government of Norway has provided \$575,000 of emergency assistance through the IFRC.
- The Government of Spain has provided \$750,000 of emergency relief assistance including water purification tablets, blankets, temporary shelter, emergency food rations, cooking kits, and airlift support.
- The Government of Sweden has provided \$288,000 of emergency relief supplies.
- The Government of Switzerland has provided \$320,000 for emergency assistance and reconstruction.
- The Government of the United Kingdom has provided \$1.4 million in emergency aid channeled through the British Red Cross and several NGOs.

U.S. Government (USG) Assistance

USAID Personnel/Assessment Team

- On June 24, a four-person USAID/OFDA assessment team arrived in Lima and then traveled to Tacna with U.S. Embassy and USAID/Lima personnel. A representative from PAHO accompanied the team. Three additional USAID/OFDA members subsequently augmented the team.
- The assessment team, working in cooperation with INDECI and the local authorities, established its base in Tacna and received three USAID/OFDA airlifts of relief supplies.
- In cooperation with INDECI and MINSA, the team conducted damage and needs assessments from the air and on the ground in the affected communities of Arequipa, Moquegua, and Tacna departments, and is now overseeing the disbursement of three USAID/OFDA airlifts of relief supplies to the affected population.
- A USAID/OFDA assessment team member, deployed to Arequipa to provide additional coordination with the GOP operation center, traveled to the coastal provinces of Camana and Islay with a team including INDECI personnel and local firefighters to conduct damage and needs assessments.
- USAID/Lima is conducting ongoing damage assessments to determine rehabilitation and reconstruction needs.
- A USAID/OFDA-funded U.S. Geological Survey (USGS) team of four earthquake experts arrived in Peru on July 23 to conduct a two-week assessment with their Peruvian counterparts in an effort to develop hazard evaluation measures that could reduce future damages from seismic activities in the affected region.

USAID/OFDA Assistance

- On June 24, U.S. Ambassador to Peru John Hamilton issued a disaster declaration due to the earthquake. In response, USAID/OFDA released \$25,000 for the local purchase of emergency relief supplies, including building materials for the construction of temporary shelter and batteries for emergency generation of power.
- On June 25, USAID/OFDA airlifted an initial package of relief supplies from its stockpile in Miami, Florida to the affected area, including 300 rolls of plastic sheeting for use in the construction of 1,200 temporary shelters, 2,700 wool blankets, six 3,000-gallon water bladders and 5,200 five-gallon water jugs. All of these relief commodities were consigned to INDECI and distributed to the affected populations in the following towns in Moquegua and Tacna departments: Candarave (75 rolls of plastic sheeting, 100 water jugs, one water bladder, and 225 blankets); Quilahuani (60 rolls of plastic sheeting, 200 water jugs, and 250 blankets); Pallata (10 rolls of plastic sheeting, 50 water jugs, and 50 blankets); Talaca (15 rolls of plastic sheeting, 50 water jugs, and 75 blankets); Locumba (40 rolls of plastic sheeting, 500 water jugs, one water bladder, and 1,000 blankets); urban Moquegua (20 rolls of plastic sheeting, 500 water jugs, and 300 blankets); and rural Moquegua (80 rolls of plastic sheeting, 1,500 water jugs, four water bladders, and 1,000 blankets). Each roll of plastic sheeting can provide 2,400 square feet of material sufficient for the construction of approximately four temporary shelters, each shelter capable of housing a family of five.
- On June 28, USAID/OFDA airlifted a second package of relief supplies from its stockpile in Miami, Florida to the affected area, including 800 additional rolls of plastic sheeting for use in the construction of 3,200 temporary shelters and 2,300 wool blankets. These relief supplies were consigned to INDECI and distributed to the affected populations in Moquegua and Tacna departments.
- On June 29, USAID/OFDA released \$50,000 for the local purchase and transport of emergency relief supplies including temporary shelter materials. An additional \$210,000 was subsequently provided by USAID/OFDA on July 3 for the local purchase of nails, tools, and wood posts. These supplies are being used in combination with plastic sheeting already airlifted by USAID/OFDA to affected areas for the construction of temporary shelters.

• On July 4, USAID/OFDA airlifted a third package of relief supplies from its stockpile in Miami, Florida to the affected area, including 700 rolls of plastic sheeting for use in the construction of 2,800 temporary shelters, 3,200 five-gallon water jugs, and 2,000 wool blankets. These relief supplies were consigned to INDECI for distribution to the affected populations in Arequipa (Camana and Islay provinces), Moquegua, and Tacna departments.

Other USG Assistance

- USAID/Food for Peace (FFP) redirected a total of 657 MT of food aid from warehouses in Lima and Puno to affected areas in Arequipa, Moquegua, and Tacna. Caritas, in cooperation with PROMUDEH, INDECI, and other local organizations, distributed this food aid (consisting of bulgur, corn-soy blend, wheat flour, peas, and vegetable oil) in Moquegua and Tacna. The Adventist Development and Relief Agency, in cooperation with INDECI and other local organizations, distributed this food aid (consisting of bulgur, corn-soy blend, peas, and vegetable oil) in Arequipa. It is estimated that this assistance will benefit 40,000 food insecure families. The total value of this assistance is \$324,724.
- Based upon a request received from the air police detachment commander in Pucallpa, the U.S. Department of State's Narcotics Affairs Section of the U.S. Embassy (STATE/INL) provided 5,000 Meals-Ready-to-Eat (MREs) with a value of approximately \$25,000.

USG Funding Summary

USG Agency	Action	Funding
USAID/OFDA	Disaster Assistance Authority for local purchase of relief supplies	\$25,000
USAID/OFDA	1,800 rolls of plastic sheeting (for 7,200 temporary shelters)	\$486,000
USAID/OFDA	7,000 wool blankets	\$42,000
USAID/OFDA	8,400 five-gallon water jugs	\$16,800
USAID/OFDA	Six 3,000-gallon water bladders	\$15,000
USAID/OFDA	Three airlifts of relief commodities	\$277,250
USAID/OFDA	Local purchase and transport of relief supplies	\$270,000
USAID/OFDA	USGS Earthquake Hazard Evaluation Team	\$16,000
Total	USAID/OFDA Assistance	\$1,148,050
USAID/FFP	657 MT of food aid	\$324,724
Total	USAID/BHR Assistance	\$1,472,774
STATE/INL	5,000 Meals-Ready-to-Eat (MREs)	\$25,000
Total	USG Emergency Assistance for June 23 Earthquake	\$1,497,774

Mitigation Assistance

- For more than 10 years, USAID/OFDA has provided extensive training in Peru and neighboring seismically
 active countries to increase their capacity to prepare for and respond to earthquakes and other natural disasters.
 Courses include Rescue from Collapsed Structures, Advanced First Aid, and Damage Assessment and Needs
 Analysis.
- USAID/OFDA recently assisted the GOP in establishing a first responder program for southern Peru, working with Civil Defense, the Ministry of Health, and the Voluntary Fire Fighter Corps.

Public Donation Information

- In the interest of effective coordination of public response, USAID encourages the public to contact directly those private voluntary organizations (PVOs) currently working in the region to provide monetary donations.
- Those interested in providing specific technical relief services or commodities should contact Volunteers in Technical Assistance's (VITA's) Disaster Information Center for information and guidelines at 703-276-1914.
- USAID will not deviate from standard Denton Program procedures for transporting privately donated relief supplies. USAID will prioritize delivery of essential relief commodities. For more information on the Denton Program, please refer to the USAID website at http://www.usaid.gov/hum_response/pvc/denton.html.
- For additional information about the relief effort in Peru, please refer to the Natural Disasters section of ReliefWeb at http://www.reliefweb.int/. For a list of NGOs active in the relief effort in Peru, please refer to InterAction's website at http://www.interaction.org/peru/index.html.
- The American Red Cross donations hotline is 1-800-HELP NOW.

USAID/OFDA fact sheets can be obtained from the USAID web site at http://www.usaid.gov/hum_response/ofda/situation.html

